

A4 Sub C1
sleeve for reducing wear between the cutting tool and said bit holder, said protective wear sleeve having an external portion and a portion that is adapted to being received in said bit holder, said wear sleeve portion that is adapted to be received including a rearward disc end portion, an annular groove portion and a forward tapered portion, and a retainer, wherein when said wear sleeve is hammered into position inside said bit holder, said retainer is biased outwards against said bit holder, whereby once said protective wear sleeve is set in said bit holder by axial blows with a hammer, said protective wear sleeve will remain in said bit holder without relative rotational or axial movement between said protective wear sleeve and said bit holder.

A5 Sub C1
3. (Amended) The apparatus according to claim 2 wherein said retainer is positioned around said annular groove of the wear sleeve.

A6 Sub C1
7. (Amended) The apparatus according to claim 1 wherein the external portion is adjacent to the forward tapered portion, said wear sleeve external portion has a shoulder and a rounded undercut portion between said shoulder and said forward tapered portion of said wear sleeve, whereby when said wear sleeve is subjected to large loads and torques, the rounded undercut portion weakens and fails first.

8. (Amended) The apparatus according to claim 1 wherein said retainer is generally a cylindrical split sleeve retainer having beveled portions at both ends of said cylindrical retainer, whereby said beveled end portions compress when inserted into said bit holder, said beveled ends help bias said cylindrical split sleeve outwardly away from said wear sleeve.

A7 Sub C1
10. (Amended) A joint coupling comprising:
a female member,
a male member,
said male member having an external portion and a portion that is adapted to being received in said female member, said male member portion that is adapted

Sub
C1
A7
to be received including a rearward disc end portion, an annular groove portion, a forward tapered portion and a retainer,

wherein when said male member is hammered into position inside said female member, said retainer is biased outwards against said female member,

whereby once said male member is set in said female member, said male member will remain in said female member without relative rotational or axial movement between said male member and said female member.

11. (Amended) The joint coupling according to claim 10 wherein said retainer is positioned around said annular groove of the male member.

A8 Sub
C1
15. (Amended) The joint coupling according to claim 10 wherein the external portion is adjacent to the forward tapered portion, said male member external portion has a shoulder and a rounded undercut portion between said shoulder and said forward tapered portion of said male member, whereby when said male member is subjected to large loads and torques the rounded undercut portion weakens and fails first.

Sub
C1
A9
18. (Amended) A cutting tool assembly comprising:

a bit holder,

a protective wear sleeve for reducing wear between the cutting tool and said bit holder,

said protective wear sleeve having an external portion and a portion that is adapted to being received in said bit holder, said wear sleeve portion that is adapted to be received including a rearward disc end portion, an annular groove portion, a forward tapered portion and a retainer, wherein when said wear sleeve is hammered into position inside said bit holder, said retainer is biased outwards against said bit holder, whereby once said protective wear sleeve is set in said bit holder by axial blows with a hammer, said protective wear sleeve will remain in said bit holder without

A⁹
relative rotational or axial movement between said protective wear sleeve and said bit holder.

Please add the following new claims:

Sub B¹
19. (New) An apparatus for mounting a cutting tool used in mining, road working or earth moving comprising:

a bit holder including a cavity bore having a rearward cylindrical portion,

A¹⁰
a protective wear sleeve for reducing wear between the cutting tool and said bit holder, said protective wear sleeve having a portion that is adapted to being received in said bit holder, said wear sleeve portion that is adapted to be received including a rearward disc end portion, an annular groove portion, a forward tapered portion and a retainer,

wherein when said male member is hammered into position inside said female member, said retainer is biased outwards against said rearward cylindrical portion,

whereby once said protective wear sleeve is set in said bit holder by axial blows with a hammer, said protective wear sleeve will remain in said bit holder without relative rotational or axial movement between said protective wear sleeve and said bit holder.

Sub C¹
20. (New) The apparatus according to claim 19 wherein said wear sleeve further comprises an external portion having a shoulder.

Sub B²
21. (New) An apparatus for mounting a cutting tool used in mining, road working or earth moving comprising:

a bit holder including a cavity bore having a forward tapered portion and a rearward cylindrical portion,

a protective wear sleeve for reducing wear between the cutting tool and said bit holder, said protective wear sleeve having a portion that is adapted to being received in said bit holder, said wear sleeve portion that is adapted to be received including a

Sub
B2

rearward disc end portion, an annular groove portion, a retainer and a forward tapered portion,

wherein when said male member is hammered into position inside said female member, said retainer is biased outwards against said rearward cylindrical portion,

whereby once said protective wear sleeve is set in said bit holder by axial blows with a hammer, said protective wear sleeve will remain in said bit holder without relative rotational or axial movement between said protective wear sleeve and said bit holder.

Sub
C1

22. (New) The apparatus according to claim 21 wherein the wear sleeve has an external portion adjacent to the forward tapered portion, said wear sleeve external portion has a shoulder and a rounded undercut portion between said shoulder and said forward tapered portion of said wear sleeve, whereby when said wear sleeve is subjected to large loads and torques, the rounded undercut portion weakens and fails first.

23. (New) A wear sleeve for reducing wear between a cutting tool and a bit holder comprising:

an external portion and a portion that is adapted to being received in said bit holder, said wear sleeve portion that is adapted to being received including a rearward disc end portion, an annular groove portion and a forward tapered portion, said annular groove portion adapted to receive a generally cylindrical retainer,

wherein said wear sleeve has an external portion adjacent to the forward tapered portion, said wear sleeve external portion has a shoulder and a rounded undercut portion for forming a preferential fail point between said shoulder and said forward tapered portion of said wear sleeve.

24. (New) A cutter bit wear sleeve for reducing wear between a cutting tool and a bit holder, the wear sleeve having a central axis, said wear sleeve comprising:

A 10

Sub
C1

an annular groove portion adapted to receive a generally cylindrical retainer;
a forward tapered portion; and
a shoulder;

wherein said forward tapered portion is between said annular groove and said shoulder, and said forward tapered portion is axially spaced from said shoulder.

25. (New) The cutter bit wear sleeve according to claim 24 further comprising a rounded undercut portion, wherein said rounded undercut portion is between said shoulder and said forward tapered portion of said wear sleeve.

26. (New) The cutter bit wear sleeve according to claim 24 further comprising a retainer.

27. (New) The cutter bit wear sleeve according to claim 25 further comprising a retainer.

A10

28. (New) The cutter bit wear sleeve according to claim 27 wherein said retainer is positioned around said annular groove of the wear sleeve.

29. (New) A cutter bit wear sleeve for reducing wear between a cutting tool and a bit holder comprising:

an annular groove portion; and
a retainer attached to said wear sleeve within said annular groove wherein said retainer has a central axis and beveled end portions angled toward said central axis.

30. (New) The cutter bit wear sleeve according to claim 29 wherein said beveled ends are initially angled between 22 degrees - 28 degrees from the central axis.

31. (New) The cutter bit wear sleeve according to claim 29 wherein said retainer said beveled ends are initially angled at about 25 degrees from the central axis.

Sub
C1
A 10

32. (New) The cutter bit wear sleeve according to claim 31 wherein said retainer is made from spring steel.

33. (New) The cutter bit wear sleeve according to claim 29 further comprising:
a shoulder; and
a forward tapered portion;
wherein said forward tapered portion is between said annular groove and said shoulder.

34. (New) The cutter bit wear sleeve according to claim 33 further comprising:
a rearward disc end portion adjacent said annular groove.

35. (New) The cutter bit wear sleeve according to claim 29 further comprising:
an external portion, wherein a forwardmost end of said external portion includes a plurality of notches.
